

effect of law." (Guidelines, p.2) To the extent the Examiner relied on the Guidelines as substantive or procedural law, the Applicant objects.

For a review of patentability, the examiner is admonished to "review the totality of the evidence" including the specification, "before reaching a conclusion." (Guidelines, p.24)

The MPEP notes that "35 USC § 101 serves to ensure that patents are granted only on those inventions that are 'useful.'" As such, an invention must be "statutory subject matter" and "the claimed invention" must be "useful for some purpose either explicitly or implicitly." (See MPEP 2107.01) "This can occur when an applicant fails to identify any specific and substantial utility for the invention or fails to disclose enough information about the invention to make its usefulness immediately apparent to those familiar with the technological field of the invention. [citations omitted] The second type of deficiency arises in the rare instance where an assertion of specific and substantial utility for the invention made by an applicant is not credible." (Id.)

The Examiner has not made the assertion that the application's claim of utility is not credible (i.e., that it is wholly inoperative or 'incredible' or 'totally incapable of achieving a useful result'), thus this "second type" is not at issue in these proceedings.

Thus, the Examiner is, essentially, arguing that "applicant fail[ed] to identify any specific and substantial utility for the invention." The Examiner cites MPEP 2106 (II)A, which deals with "non-functional descriptive material."

With respect to computer-related disclosures, the MPEP provides guidance. It distinguishes between "functional descriptive material" and "nonfunctional descriptive material," stating that "'functional descriptive material' consists of data structures and computer programs which impart functionality when employed as a computer component." (MPEP 2106.01)

Thus, the Examiner essentially claims that the present disclosure is "non-functional descriptive material." The Examiner makes the assertion, without citation, that "software, per se, is 'non-statutory subject matter' and claim 1 do [sic] not have 'practical application' because the 'final result' claimed ... is not producing 'useful, tangible and concrete' [sic] and therefore, claim 1 is a non-statutory subject matter." (First Office Action p.5-6)

"The tangible requirement does not necessarily mean that a claim must be tied to a particular machine or apparatus...." (Guidelines, p.21) This should obviate the need for the disclosure to state that a particular machine is an element, or, likewise, that a computer, disk drive, or other apparatus is an element. "When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of the technology permits the function of the descriptive material to be realized." (MPEP 2106.01)

A.) THE SYSTEM'S DATA EXISTS, AND IS PROCESSED, STORED, AND USED, IN COMPUTER-READABLE MEDIA:

In the computer science art area, it is common knowledge that computers--beyond their cases, boards, and wires--have tangible, useful elements to them, in the form of information. Information in a computer is made up of a collection of binary digits. These binary digits are represented by physical, positive and negative electrical states in hardware inside the processing and storage units of the computer. These electrical states are detectable, readable, interpretable, alterable, and useful. They exist in tangible media: the computer hardware.

A computer program is a set of instructions for how these electrical states are changed--physically changed through altering electrical currents--to produce a specific result from a particular set of circumstances, some of which are inputted.

Computer instructions and computer processes are "stored" in a tangible medium in the sense that computer instructions and processes reside in physical computer elements such as transistors or on chips. While this storage might be temporary, there is a definite physical state that is electro-magnetic in nature, in these physical computer elements.

This is very analogous to computer "storage" with respect to information "stored" on a computer hard drive; storage on a hard drive is simply a collection of electronic states on a magnetic medium. After all, storage on a magnetic medium is a collection of temporary magnetic flux patterns that are read by an electro-mechanical head moving over it. Like all things, this type of storage does not last forever: it is temporary in that it degrades over time.

Likewise, an electromagnetic state in a transistor represents the storage of a bit of information. Just like a hard drive's flux pattern, the state is readable, meaningful, and useful, and exists in a physical realm.

All of this is commonly known in this area of art and represents fundamental knowledge and practice in this art area.

References to *processing or making use of data which is in a computer readable format* are implicit in the disclosure (reference can be made to the preceding paragraphs, as well as being generally known in the art) and are made in multiple paragraphs in the specification too numerous to mention, including paragraphs 0066, 67, and 68, as well as the representations made in all Tables used as examples in the specification. For example, "data might be processed so that it is tab or comma delineated, in ASCII text, converted between one file format or another or even edited...." (See specification, paragraph 0068)

In addition to references of processing data which is in a computer readable format, the present disclosure also notes the *use of or transmitting data over electromagnetic carrier signals*, such as in paragraphs 0066, 67, and 69.

As such, the data in the present disclosure is in a computer-readable format and exist in a computer-readable medium: wires, transistors, chips, memory modules, disk drives.

B.) THE SYSTEM HAS DISTINCT, PHYSICAL COMPONENTS, WHICH ARE CONCRETE AND TANGIBLE, WITHIN WHICH THE DATA IS PROCESSED, STORED, AND USED:

As noted in the specification, paragraph 56, "Figure 1 illustrates in approximated physical form, [a] contact information Database System, 10, according to a preferred embodiment of the present invention." Further, a concrete, physical "Central Data Receiving and Storage Device, 12," is pointed out in paragraph 57 and Figure 1, as is "a Control Computer, 16," and a "Querying Device, 18." It is also noted that these elements "may be combined into the same physical device...." (See, specification, paragraph 0059) These elements are then explained further by their functionality, by referring to them collectively as the "Data Manager, 20." (See, specification, paragraphs 0060-61)

As such, there are distinct and numerous examples where, in the specification, it is noted that physical elements, computer-readable data, and electromagnetic carrier signals are part of the disclosure.

To reinforce this already-present situation, the Applicant has made amendments to Claims 1, 13, 23, 25, and 27, as shown in the amendments that follow.

C.) THE RETURNED INFORMATION IS USEFUL, CONCRETE, AND TANGIBLE:

In the present disclosure, there is a "return" of contact information from a query (Claims 1-12, 14-21, 24, and 26.) In Claims 13, 22, 23, 28-29, and 31-36, a "response" of contact information is "generat[ed]" for a query. These items are discrete pieces of valuable information and are useful, concrete, tangible results. They are repeatable and predictable, and hence meet the test of *In re Swartz*, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000).

This is abundantly clear in the specification and the examples are replete in the specification: "Any records that are found (preferably with different Email addresses than in the query) are returned to [the] Query Module for outputting to the Sender, typically in the form of a character string to be displayed as a printed response, as an update to the Sender's database, or as an electronic output file." (Specification paragraph 0073, emphasis added)

Moreover, the specification discusses, at length, how a physical embodiment of the present disclosure might be configured. See, e.g., Figure 1 and paragraphs 0056-60. Further, the specification makes it clear that the response or return to an inquiry (i.e., at the end of the processing of data) will be sent back to the inquiring party: "...once an alternative Email address or other data element is found it may be validated or authorized prior to *delivery back to the Sender who inputted the initial query.*" (Specification paragraph 0132, emphasis added.)

Additionally, Figure 1 clearly shows dual-directional arrows, between the Sender, 18 (defined in paragraph 0006 as an entity "desiring communication with the Recipient" while a "Recipient," defined in paragraph 0004, is an entity "that changes [personally identifiable information] over time and with which communication is desired....") and the Central Receiving and Storage Device, which is part of the primary embodiment of the present disclosure. Thus, there is clearly two-way communication between the physical embodiment and users who request information: a question (a "query," which is a term commonly used in the art) and an answer (a "return," which is also a term commonly used in the art).

As is clear from the specification, the users of the system ("Sender") request contact information on a Recipient and get back contact information. This information is in the form of machine-readable code ("typically in the form of a character string," paragraph 0073), which is in the form of digital information. The term "character string" is commonly used in the art. This digital information is created by the system and transferred back to the Sender. This is clear from the specification.

The result, or output or "return" or "response," from the computer program is, fundamentally, a set of positive and negative electric states in hardware, which are capable of being read and interpreted. As such, all results, outputs, returns, or responses from a computer program which is on some computer-readable medium is as much a discrete, useful, concrete, tangible result as any from a physical machine. To maintain otherwise is contrary to the guidelines of MPEP 2106.01.

This fact is explicitly recognized with respect to Claim 1, as the Examiner recognized the physical, "real world" nature of the claims, stating: "Claim 1 have [sic] the result of producing 'real world' results related to 'generating a response'...." (First Office Action, p.6 and 9)

The Examiner appears to draw the distinction between a "real world" result and a "practical real world use," admitting that the disclosure has the first characteristic, but asserting it lacks the second. The Applicant has been unable to find such a distinction in the case law or MPEP.

The usefulness of the return to the query is discussed in the specification, paragraphs 000-0033, for example.

Claims 1, 13, 23, 25, and 27 have been amended, as seen below.

D.) THE PRESENT DISCLOSURE SOLVES PROBLEMS PRESENT IN THE PRIOR ART:

As noted in the specification, there are at least three major, combined problems not solved by the prior art (see specification, paragraph 0018): a) people change contact information fairly frequently and Email addresses even more frequently (see, e.g., specification, paragraphs 0003 and 0010); b) existing change of address systems require the person changing his/her contact information to notify the administrator of the system (see, e.g., specification, paragraphs 0010, 12, and 14); and c) existing change of address systems do not return/provide contact information of the same type as the query (see, e.g., specification, paragraph 0017) so that an inquiring entity can not get an Email address back in return for an Email address.

As stated above, this is explained in the specification in paragraphs 0001 through 0033.

II. CLAIM REJECTION - 35 U.S.C. § 102(b)

For a section 102 rejection, the examiner is required to present a single reference that teaches or enables each and every one of the claimed elements, expressly or inherently, as interpreted by one of ordinary skill in the art. This type of objection can be overcome by demonstrating the claims are patentably distinguishable from the prior art or by amending the claims to the same end. See, for references, MPEP 2131. The Applicant here pursues both avenues.

A.) THE TEACHINGS OF HERTZOG:

The Examiner asserts that Hertzog (US Patent Application # 2003/0069874) teaches each and every element of the present disclosure. Hertzog is largely irrelevant to the present disclosure since it deals with updating a personal electronic address book. While it deals with accessing contact data from a database, in the form of a "virtual card," it works only with a graphical user interface and requires a user to *manually* determine what contact data the user requires.

B.) CLAIMS 1-24, 26, 28-29, 31-36:

1.) Claim 1:

- a.) Hertzog does not describe an input consisting of "contact information."

The present disclosure teaches a new way of finding alternate contact information when given other contact information. Points of contact are referred to as "personally identifiable information" or "PII," and described as one of the following: "postal addresses, telephone numbers, and internet electronic mail (Email) addresses, birth date, and governmentally-issued identification number (such as drivers license number, social security number, or passport number) used to identify" a "person, household, institution, or business." (Specification paragraph 0003)

Contact information is used to describe and locate an entity.

Hertzog does not describe inputting or querying using contact information. Hertzog does not describe returning contact information using an input or query consisting of contact information.

Hertzog's query feature is limited to searching for the *name* of the contact, see Hertzog paragraph 0111. That is, Hertzog only teaches that one can search for a name in his electronic Rolodex and then return a "virtual card" with that person's address, phone number, etc. (Hertzog paragraph 0113). Specifically, Hertzog describes using a name inputted into the query (Hertzog paragraph 0111), and returning a virtual card. This is evident on Hertzog's figures, such as Hertzog Figs 8 through 9D. This is the identical functionality to Microsoft Outlook's search capability or any physical Rolodex.

Nowhere in Hertzog is a description of using point of contact information to find other contact information. Instead, his system uses only a name inputted to find a virtual card that might have points of contact on it.

b.) Hertzog does *not* describe a means for "[identifying] alternate contact information of the same type as said query which is related to the entity".

This element is not present anywhere in Hertzog. Nowhere in Hertzog's disclosure does he describe a means of identifying, say, an alternate address when the query is an address. Hertzog is limited to returning a card containing the same name as the query, and then the *user must look at the card* for the contact information. The "virtual card" that Hertzog describes contains multiple pieces of data. The *user* identifies the contact information that the user wants. Moreover, Hertzog's system does not return any particular or specific type of data, merely *all* the data associated with the queried name.

There is nothing in Hertzog which describes how his disclosure goes about identifying the contact information within a virtual card, from amongst the other information about that individual.

First, Hertzog requires a "graphical user interface" ("GUI") or a means of showing data on a screen. This required element is laid out in the disclosure repeatedly in Hertzog,

starting Hertzog paragraph 0044, and further detailed in Hertzog paragraphs 0108 onward, as well as Hertzog Figures 8 through 10, 24, 26, and 28.

In essence, his system simply returns an entire "virtual card" containing *all* of the information associated with the name found in the query. In effect, a set of human eyes and a human brain are required to find the contact information on the virtual card returned by Hertzog. Useless and potentially useful information is returned and shown on a screen along with all the rest. *There is no "identification" of individual data on a virtual card.*

In the present disclosure, the use of the word "identify" makes it clear that some action on the part of the system is required, in order for a system to "identify" something. The Merriam-Webster defines the verb to mean "to conceive of as united...." The Encarta dictionary defines the verb to mean "to recognize ...something and to be able to say ...what ...it is." The Oxford English Dictionary defines the verb to mean to "establish the identity of; [to] recognize or select by analysis...."

"Identification" requires some type of action. In Hertzog, the only "identification" is implied--the *user* undertakes all identification *manually*--because this identification takes place outside of the disclosure in Hertzog.

Hertzog is antithetical to the present disclosure. The present disclosure requires an input/query of contact information, and then a return of contact information from that query. Specifically, the present disclosure requires a "means for accessing and searching said database that ...identifies alternative contact information of the same type as said query which is related to the entity...." In the present disclosure, the *system* "identifies alternate contact information of the same type as said query which is related to the entity".

The present disclosure teaches *two* things Hertzog does not do: it picks out ("identifies") contact information from amongst surrounding data related to a single individual, and returns that specific type of data (i.e., data of the same type as the query data).

c.) Hertzog does not teach returning a specific type of data to the exclusion of other data.

As noted above, Hertzog returns a virtual card, containing both potentially useful and some useless data visually to a human user.

The present disclosure is much more targeted and automatic. By requiring "a third means for responding to queries that returns, in response to said query, different contact information of the same type as said query, said different contact information corresponding to the same entity as said query," the present disclosure *requires a return of a specific type of data* about the same individual as in the query.

Hertzog's shotgun approach to returning data is logical for a Rolodex system but has nothing to do with the present disclosure's automatic look-up process. There is no requirement in Hertzog that a query return data of the same type as in the query. This may or may not happen and is ultimately irrelevant to Hertzog, who teaches only returning a whole virtual card. Further, Hertzog's system does not know what it is returning, since it returns all related data, leaving a human user to sort through the useless data. For example, if a user of Hertzog's system wanted only an email address, that user would have to visually scan down the virtual card to find the email address, effectively hidden amongst the physical address data, the phone number data, etc. The present disclosure, therefore, contains a limitation and functionality not present in Hertzog and not taught by Hertzog.

d.) Hertzog discloses a data storage means.

Data storage was not first disclosed by Hertzog, rather, it is a fundamental element present in every computer ever devised. Data storage means are necessary for the operation of all computer equipment, even if just to store some basic operating instructions. In this regard, Hertzog does not teach anything different from the prior art.

e.) Hertzog discloses a database of contact information for a plurality of entities.

Here, again, databases were not first disclosed by Hertzog, rather a database is a fundamental element of every address book system ever devised, whether in paper or electronic form.

Moreover, the Examiner asserts that Hertzog teaches a database having multiple data sets and fields "related to" personal information "attributes." If the Examiner is saying that Hertzog discloses a database with multiple data sets consisting of multiple fields consisting of individual items of personal contact data, this, too, was not first disclosed by Hertzog, but is the very definition of an address book, certainly dating back as far in time in the world as there were street addresses.

f.) Hertzog discloses an ability for information in a database to be accessed by a database management system which executes database queries.

Here, again, accessing database information was not first disclosed by Hertzog, rather it is a fundamental element of every database system ever devised. A database without a querying function is useless.

g.) Hertzog discloses a means of searching a database by comparing the contents with a search string. (First Office Action, first paragraph, page 13.)

If the Examiner is asserting the above, then, once again, Hertzog was certainly not the first to disclose this basic functionality of all electronic database systems. Essentially, what Hertzog teaches is a simple word search through a Microsoft Outlook address book. Since this element was already present in Outlook prior to Hertzog's "disclosure," Hertzog was not first to disclose it.

h.) Hertzog does not teach a means for responding to queries, returning different contact information of the same type as the query.

Hertzog does not contain this limitation or functionality in his disclosure. Hertzog's query feature is not required to return different contact information of the same type as the query. In fact, Hertzog's query feature does not require a return of particular contact information. Where a return occurs in Hertzog, it is typically of contact information of a different type as the query. Hertzog uses an unsophisticated return: input a name search string and return the virtual card where that name search string appears.

In contrast, the present disclosure details a "return[], in response to [a] query, different contact information of the same type as the query...." This limitation is not taught by Hertzog.

Further, Hertzog's query feature requires a return of data on a graphical user interface, called a "browser panel" by Hertzog. This feature is evident in Hertzog Figs 8 through 9D, and present in Hertzog paragraph 0113 et seq.

In the present disclosure, there is no such "virtual card," and no name-based "power find." This idea is antithetical to the present disclosure. Hertzog's return of data would render the object of the present disclosure useless.

In summary, Hertzog does not teach or enable each and every one of the claimed elements of Claim 1, expressly or inherently, as interpreted by one of ordinary skill in the art.

2.) Claim 2:

The above arguments are equally valid with respect to Claim 2, thus, rather than repeat each and every argument, the Applicant incorporates them here by reference.

a.) Hertzog does not teach "a means for identifying contact information of a second type which is related to the same entity as said query."

The arguments from above apply equally to this item. In summary, Hertzog teaches no means of identifying any particular data. Identification of data is left wholly to the human user *to be done manually*.

The Examiner's citation of Hertzog paragraphs 0113 and 0115 is irrelevant to this point. That text states only that a human user can look at a screen displaying a virtual card and select the virtual card itself as belonging to a certain classification, such as a business contact or a personal contact. It's merely a way for a human user to *manually* sort virtual cards, thereby distinguishing between different cards, and has nothing whatsoever to do with identification of data *within or on* a virtual card. Thus, Hertzog is irrelevant to, say, identifying a physical address related to a specific individual after searching using the specific individual's email address. The Hertzog paragraphs cited by the Examiner deal with distinguishing between different individuals, *not* different data regarding the *same* individual.

b.) Hertzog does not teach "a means for searching through said database, using said second type of personal contact information."

Once again, since Hertzog relies entirely upon a human user to decide what they're looking for, there is no disclosure dealing with how, for example, the system might search using an email address, find a related physical address, then search the database a second time to find Email addresses related to that physical address.

These steps can not be performed by Hertzog's disclosure and are not disclosed in Hertzog. Once again, Hertzog returns a virtual card and the rest is up to the human user. The Examiner's citation of Hertzog paragraph 0116 is irrelevant, since that paragraph deals only with the parts of the virtual card, not with any searching capability.

c.) Hertzog does not teach "a means for identifying, in the database, alternate contact information of the first type in said query which is related to said second type of personal contact information, for the same entity."

The Examiner's citation of Hertzog paragraph 0116 and Figure 9A is irrelevant here too. Each clause in the same claim must be read in conjunction with the other clauses in the same claim. An example regarding this part of the present disclosure might be clarifying: a search is done using an email address; a physical address is returned; a search is done using the physical address, which leads to the discovery of a related email address; which is identified and returned. This type of hypothetical example is explained in the present disclosure at paragraphs 0120 onward.

The Examiner's citations do not support the Examiner's assertions. Hertzog does not teach the "append-reverse-append" procedure described in the present disclosure. (See, e.g., paragraph 0026, et seq., in the present disclosure.)

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 2, expressly or inherently, as interpreted by one of ordinary skill in the art.

3.) Claim 3:

Claim 3 is a dependent claim, and ultimately depends upon Claim 1. The arguments presented above are incorporated herein.

Hertzog does not describe "a means for repeating said searching and said identifying means, until all related contact information of the type in said query for said entity is identified in said database."

There is no suggestion in Hertzog regarding repeated searching using data identified during a prior search.

The Examiner's citation of Hertzog paragraph 0109 is irrelevant to this element. That paragraph deals with the screen result of a query in Hertzog. It reveals what Hertzog's search output is: a screen shot of a Rolodex-style virtual card. All identification in Hertzog is done *manually* by a human user looking at a screen.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 3, expressly or inherently, as interpreted by one of ordinary skill in the art.

4.) Claim 4:

Claim 4 is a dependent claim, and ultimately depends upon Claim 1. The arguments presented above are incorporated herein.

Nowhere in Hertzog is described a "means for selecting a single one amongst more than one alternate contact information elements". Hertzog describes merely a means of presenting a virtual card that's been chosen in a word search. Any "selection means" amongst alternate contact points in Hertzog is the brain of the person looking at the virtual card; Hertzog requires human eyes and brain to make this selection. This is neither described or implicit in Hertzog.

The Examiner appears to confuse the concepts of finding a name on a virtual card--selecting between cards/entities--and identifying specific data amongst that for a particular entity. Put another way, Hertzog teaches how to thumb through a Rolodex, looking for the name you wanted to find. But Hertzog does not teach how--once you found the card with the right name--to distinguish between, say, that entity's address and their phone number. That is left to the user. As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 4, expressly or inherently, as interpreted by one of ordinary skill in the art.

5.) Claims 5-8:

Claims 5 through 8 are dependent claims, and ultimately all depend upon Claim 1. The arguments presented above are incorporated herein.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claims 5-8, expressly or inherently.

6.) Claims 9-12:

Claims 9 through 12 are dependent claims, and ultimately all depend upon Claim 1 (as well as Claims 2-4). The arguments presented above are incorporated herein.

Moreover, Hertzog discloses only that users can "grant permission to access...personal information" *when the virtual card is created*. See Hertzog, paragraph 72. Hertzog discusses "published" and "nonpublished" fields. (See, e.g., Hertzog paragraph 76)

This is antithetical to the present disclosure which does not use such virtual cards and user-created entries in a database at all. Hertzog's disclosure is unlike the present disclosure, and actually akin to permissions granted by the CHMOD function, which dates back to the early days of the UNIX operating system.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claims 9-12, expressly or inherently.

7.) Claims 13, 23:

The Examiners review of these claims and the disclosure in Hertzog reveals a fundamental misunderstanding of what Hertzog discloses.

The arguments presented above, in conjunction with Claims 1 and 2 in particular, are incorporated herein.

As such, without being unduly repetitive, it is necessary to point out that Hertzog does not teach "identifying, in said database, one or more alternative contact information elements of the first type related to the entity in said query by using said second type of related contact information to search said database." Hertzog does not teach a means for *identifying* alternative contact information.

It is also necessary to point out that Hertzog does not "generat[e] a response indicating that alternate contact information of the first type for said entity is not included in said database." The Examiner's citation to Hertzog paragraph 106 is irrelevant to this element.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claims 13 and 23, expressly or inherently.

8.) Claim 14:

Claim 14 is a dependent claim, and ultimately depends upon Claim 1 (as well as Claim 9). The arguments presented above are incorporated herein.

The Examiner misunderstands Herzog as respects this Claim. The Examiner cites Herzog's paragraph 107, which deals only with updates to Herzog's database. It has nothing whatsoever to do with recursive, repetitive searches to a database.

The present disclosure, in Claim 14, is well known--in the relevant area of art--as a recursive search, "repeatedly searching the database, using said second type of contact information and alternate contact information of said first type for repeatedly searching said database, until all related contact information of said first type for said entity is identified in said database." Search results, rather than simply being displayed to a user like in Herzog, are identified and used to repeatedly search the database.

Nothing in Herzog even remotely resembles this element or limitation.

As such, Herzog does not teach or enable each and every one of the claimed elements of Claim 14, expressly or inherently.

9.) Claim 15:

Claim 15 is a dependent claim, and ultimately depends upon Claim 1 (as well as Claim 9). The arguments presented above are incorporated herein.

As such, Herzog does not teach or enable each and every one of the claimed elements of Claim 15, expressly or inherently.

10.) Claim 16:

Claim 16 is a dependent claim, and ultimately depends upon Claim 1 (as well as Claims 2, 3, and 11). The arguments presented above are incorporated herein.

It is necessary to point out that Herzog does not teach "generating and transmitting a permission request" to reveal resulting contact information. On the contrary, Herzog discloses only that users can "grant permission to access...personal information" *before* the inquiry takes place, *when the virtual card is created*. See Herzog, paragraph 72. In fact, Herzog discusses "published" and "nonpublished" fields. (See, e.g., Herzog paragraph 76) This is antithetical to the present disclosure, which does not use such virtual cards and user-created entries in a database.

The Examiner's citation of Herzog paragraph 87 is irrelevant to this element. That paragraph deals only with the relationship between tables in Herzog's database.

It is further necessary to point out that Hertzog does not contain the following limitation: "discarding contact information for said entity from said response, if said permission is not obtained." Hertzog does not teach or disclose this limitation.

The Examiner's citation of Hertzog paragraph 88 is irrelevant to this element. That paragraph deals only with the relationship between tables in Hertzog's database.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 16, expressly or inherently.

11.) Claim 17:

Claim 17 is a dependent claim, and ultimately depends upon Claim 1, as well as Claim 9. The arguments presented above are incorporated herein.

As noted above, Hertzog does not teach any "identification" step or means, other than impliedly requiring a human brain and eyes to do this manually.

The Examiner's citation of Hertzog paragraph 89 is irrelevant to this element. That paragraph deals only with a user updating another's database entry in Hertzog's database.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 17, expressly or inherently.

12.) Claims 18-21:

Claims 18 through 21 are dependent claims, and ultimately all depend upon Claim 1 (as well as Claims 2-4, 9, 10, 11, and 12, respectively). The arguments presented above are incorporated herein.

The Examiner's citation of Hertzog paragraph 141 is telling in that it highlights how Hertzog is anchored solely upon the display of a virtual card to a user. This paragraph, completely irrelevant to the elements disclosed in Claims 18-21, deals with how a user can fill in his virtual card, using a typical Windows dialog box, to put into the database. This paragraph and the entire concept of a displayed virtual card are utterly antithetical to the present disclosure.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claims 18-21, expressly or inherently.

13.) Claim 22:

Claim 22 is a dependent claim, and ultimately depends upon Claim 13. The arguments presented above are incorporated herein.

As noted above, the Examiner's citation of Hertzog paragraph 141 is irrelevant to the elements in this Claim because it deals with how a user can fill in his virtual card, using a typical Windows dialog box, to put into the database.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 22, expressly or inherently.

14.) Claim 23:

The Examiner has made no specific § 102 rejection of Claim 23; as such, the Examiner has not clearly articulated the rejection as to that claim.

With respect to this rejection, the applicant incorporates his above arguments herein.

Should the Examiner have specific arguments regarding a specific rejection of Claim 23, the Applicant asks for leave to respond.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 23, expressly or inherently, as interpreted by one of ordinary skill in the art.

15.) Claim 24:

The Examiner has made no specific § 102 rejection of Claim 24; as such, the Examiner has not clearly articulated the rejection as to that claim.

Should the Examiner have specific arguments regarding a specific rejection of Claim 24, the Applicant asks for leave to respond.

With respect to this rejection, the applicant incorporates his above arguments herein.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 24, expressly or inherently, as interpreted by one of ordinary skill in the art.

16.) Claim 25:

The Examiner has made no § 102 rejection of Claim 25.

17.) Claim 26:

Claim 26 is a dependent claim, and depends upon Claims 1 and 4, 12, and 21. The arguments presented above are incorporated herein.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 26, expressly or inherently.

18.) Claim 27:

The Examiner has made no § 102 rejection of Claim 27.

19.) Claim 28:

Claim 28 is a dependent claim, and depends upon Claim 23. The Examiner has made no specific § 102 objection to Claim 23. Claim 28 discloses further limitations upon Claim 23.

Should the Examiner have specific arguments regarding a specific rejection of Claims 23 or 28, the Applicant asks for leave to respond.

With respect to this rejection, the applicant incorporates his above arguments herein.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 28, expressly or inherently.

20.) Claim 29:

Claim 29 is a dependent claim, and depends upon Claim 23. The Examiner has made no specific § 102 rejection of Claim 23. Claim 29 discloses further limitations upon Claim 23.

Should the Examiner have specific arguments regarding a specific rejection of Claims 23 or 29, the Applicant asks for leave to respond.

With respect to this rejection, the applicant incorporates his above arguments herein.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 29, expressly or inherently.

21.) Claim 30:

The Examiner has made no § 102 rejection of Claim 30.

Claim 30 has been amended to be dependant of Claim 29, correcting a typographical error.

22.) Claim 31:

Claim 31 is a dependent claim, and depends upon Claim 23. The Examiner has made no specific § 102 rejection of Claim 23. Claim 31 discloses further limitations upon Claim 23.

Should the Examiner have specific arguments regarding a specific rejection of Claims 23 or 31, the Applicant asks for leave to respond.

With respect to this rejection, the applicant incorporates his above arguments herein.

The Examiner's citation of Hertzog paragraph 71 is irrelevant to this Claim. That paragraph deals solely with the input of "master" data into Hertzog's database, using a GUI (graphical user interface). The Claim in the present disclosure describes "grouping each record of each dataset with other records in the dataset and/or records in the database by contact information," so that the searching function is made easier. Hertzog does not teach any automatic grouping functionality; it implicitly relies upon a user to manually update information on the virtual card and then these changes are tracked. Further, there is no merging functionality in Hertzog which would prevent two or more instances of data for the same entity.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 31, expressly or inherently.

23.) Claim 32:

Claim 32 is a dependent claim, and depends upon Claim 23. The Examiner has made no specific § 102 rejection of Claim 23. Claim 32 discloses further limitations upon Claim 23.

Should the Examiner have specific arguments regarding a specific rejection of Claims 23 or 32, the Applicant asks for leave to respond.

With respect to this rejection, the applicant incorporates his above arguments herein.

The Examiner's citation of Hertzog, paragraph 125, does not teach "identifying all received data records as candidates for merging in the database". In fact, it deals with a "send" button in Hertzog's disclosure, which allows for emailing or faxing an address card. This citation is irrelevant to the present disclosure. There is simply no parallel function in the present disclosure for obvious reasons: there is no user of a 'personal information management application' to contend with.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 32, expressly or inherently.

24.) Claim 33:

Claim 33 is a dependent claim, and depends upon Claim 23. The Examiner has made no specific § 102 rejection of Claim 23. Claim 33 discloses further limitations upon Claim 23.

Should the Examiner have specific arguments regarding a specific rejection of Claims 23 or 33, the Applicant asks for leave to respond.

With respect to this rejection, the applicant incorporates his above arguments herein.

While Hertzog, paragraph 42, as cited by the Examiner, deals with the use of one or more computers to run parts of Hertzog's disclosure, it does not teach with the use of "a computing device" to identify an entity in the database described in the present disclosure that matches the entity in the particular query used in this disclosure and is associated with the contact information in the particular query used in this disclosure. That is, Hertzog's computer does not perform the tasks that the computer performs in the present disclosure. As such, the citation of Hertzog is irrelevant to Claim 33.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 33, expressly or inherently.

25.) Claim 34:

Claim 34 is a dependent claim, and depends upon Claim 23. The Examiner has made no specific § 102 rejection of Claim 23. Claim 34 discloses further limitations upon Claim 23.

Should the Examiner have specific arguments regarding a specific rejection of Claims 23 or 34, the Applicant asks for leave to respond.

With respect to this rejection, the applicant incorporates his above arguments herein.

The Examiner's citation of Hertzog, paragraph 55, is inapplicable because it deals with synchronization of local and external databases, and it does not teach "identifying" data by "comparing similar, but inexact, contact data elements to determine if the data elements are equivalent." This is the application of fuzzy logic to make data comparisons. See, e.g., the present disclosure, paragraph 183. There is no teaching of this anywhere in Hertzog.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 34, expressly or inherently.

26.) Claim 35:

Claim 35 is a dependent claim, and depends upon Claim 23. The Examiner has made no specific § 102 rejection of Claim 23. Claim 35 discloses further limitations upon Claim 23.

Should the Examiner have specific arguments regarding a specific rejection of Claims 23 or 35, the Applicant asks for leave to respond.

With respect to this rejection, the applicant incorporates his above arguments herein.

Hertzog, in paragraphs 55, 66-67, does not teach "inserting each one of plurality of selected contact information elements and relationships between contact information elements and entities". Indeed, those paragraphs in Hertzog deal with adding new users (a feature that does not exist in the present disclosure because there are no system "users" in the same sense as in Hertzog) and updating and synchronizing contacts (which, since it is a function performed by a user of Hertzog's virtual card system, is irrelevant to the present disclosure, since "users" of the present system don't update or synchronize the database or a 'personal information management system' themselves). Moreover, Hertzog's disclosure deals with synchronization between a locally stored database and a central database, requiring at least two databases. The present disclosure teaches a single database and there is no such synchronization.

Perhaps most importantly, Hertzog's disclosure does not teach with automatically inserting missing info into the database if a search comes up empty. Note that the present disclosure's Claim 35 teaches an insert performed in conjunction with Claim 23 (d)'s response to a failed query. There is no such functionality in Hertzog.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 35, expressly or inherently.

27.) Claim 36:

Claim 36 is a dependent claim, and depends upon Claim 23. The Examiner has made no specific § 102 rejection of Claim 23. Claim 36 discloses further limitations upon Claim 23.

Should the Examiner have specific arguments regarding a specific rejection of Claims 23 or 36, the Applicant asks for leave to respond.

With respect to this rejection, the applicant incorporates his above arguments herein.

Hertzog does not teach periodically receiving a plurality of datasets and processing them in the manner set forth in the present disclosure. The Examiner cites paragraph 0075 of

Hertzog for the proposition that Claim 36 has been disclosed. Hertzog's paragraph 0075 says merely that the "receiving user's" database "may...be populated...by personal information to which the receiving user has been granted access." Nothing is said in Hertzog about the other processing steps taught by Claim 36, such as the ones taught by Claim 23, to which the Examiner correctly makes no § 102 objection.

As such, Hertzog does not teach or enable each and every one of the claimed elements of Claim 36, expressly or inherently.

III. CLAIM REJECTION - 35 U.S.C. § 103

The Examiner is required to show one or more references that teach a suggestion to combine or modify the references, making the present claims obvious. The combination in turn must teach or suggest all the claim limitations.

The Applicant incorporates his above arguments herein.

A.) THE PRESENT DISCLOSURE DOES NOT NAME JOINT INVENTORS.

The present disclosure names a single inventor: Thomas R. Burke. The Examiner's statement to the contrary is incorrect.

B.) CLAIMS 25, 27, AND 30 AND THE TEACHINGS OF HERTZOG, IN CONJUNCTION WITH SMITH

The Examiner must look at whether the present disclosure *as a whole* is obvious, in light of the references. (MPEP 2141.02)

Here, the Examiner asserts that Hertzog is relevant prior art to the present disclosure. However, essentially, Hertzog teaches only a disclosure that allows a consumer user to view and synchronize their personal address books on multiple computers, using a graphical user interface and virtual Rolodex-like cards.

Hertzog does not teach querying and identifying and returning updated contact information of a particular type from a database, using contact information of the same type.

There are multiple, required elements of Hertzog which are not present in the present disclosure and demonstrate that Hertzog deals with a completely different problem and solution. As such, the present disclosure is certainly not rendered obvious from the disclosure of Hertzog.

Smith's disclosure, on the other hand, deals solely with authentication procedures for being able to access a database. It is a password-protection system, nothing more. It has very limited relevance to the present discussion, if any.

Also, the Examiner must put forth a reasonable expectation of success in the combination of references (see MPEP 706.02(j)). This was not done.

The Examiner asserts that Hertzog teaches a system for populating and maintaining a contact information database and, in conjunction with Smith (US Patent Application # 2003/0069874), the combination teaches the present disclosure.

The present disclosure teaches limitations that are not present in either Smith or Hertzog, and not suggested by either.

1.) Hertzog's requirement of a "personal information management application" teaches away from the present disclosure.

Hertzog is, at its heart, a way *for a consumer* to have several personal address books in several different locations or different computers. Hertzog, as such, requires the existence and use of an application where the consumer puts his address book (see Hertzog, Claims 1 and 9). Hertzog calls this a "personal information management application" ("PIM" application). Hertzog specifies this PIM application be one of the following applications: Microsoft Outlook (Hertzog paragraph 0005, 0043), Lotus Notes (Hertzog paragraph 0043), Palm Desktop (Hertzog paragraph 0046). These are, essentially, consumer-focused applications. The "personal information management application" is the digital version of a Rolodex, nothing more. (See, e.g., Hertzog, paragraph 0004: "Where a user has multiple devices each storing a local copy of personal information..." or Hertzog paragraph 0003: "the need to maintain multiple, synchronized copies of [] personal information...on...a personal computer...a portable PDA...or...via a network.")

The present disclosure functions without any "personal information management application" whatsoever. The present disclosure teaches how a third party might find out what someone's new email address was, similar to the way they might find out a person's new address from the US Postal Service, after they moved. In contrast, Hertzog teaches how a person might make a change in *their own* Rolodex once they move around. It is absolutely irrelevant to the present disclosure how a person stores their address information for their own personal use.

Since the present disclosure does not require or use a consumer-based application, Hertzog teaches away from the present disclosure. Moreover, Hertzog's requirement has no logical analog in the present disclosure; this feature is completely irrelevant to the present disclosure. These are not requirements of the present disclosure, and, hence, Hertzog and Smith teach away from the present disclosure.

2.) Hertzog's requirement of "personal information" validated by a "personal information management application" teaches away from the present disclosure.

As mentioned previously, Hertzog is, at its heart, an application that allows a consumer to have several address books in several different locations or different computers. Hertzog, as such, requires a user with their own personal information inputted onto a virtual card in a database and shared; and Hertzog goes a step further by requiring that the consumer user "validate" by logging into a "personal information management application" with a password (see, e.g., Hertzog claims 9 and 10 and Hertzog paragraphs 0008 and 0064). Hertzog does this to prevent multiple accessing of his database at once.

The present disclosure does not require such a validation and there is no logical analog between this "validation" and the present disclosure. It is irrelevant because of the lack of multiple databases in the present disclosure. Requirements for multiple databases teach away from a single database structure. As such, this feature is irrelevant to the present disclosure and, hence, Hertzog and Smith teach away from the present disclosure.

3.) Hertzog's requirement of particular "event occurrences" teaches away from the present disclosure.

Since Hertzog teaches an updater for a person's address book, it requires an "event occurrence" which is, essentially, data inputted on a particular day (see, e.g., Hertzog claims 1, 2, 4, 8, 9, and 10). When different data is inputted on another day, or at another time, another "event occurrence" has happened. Thus, Hertzog requires data inputted at two different times and requires that the data be synchronized between two different databases. Again, this time differential idea is important for Hertzog because he's using multiple databases accessed from different locations at different times. Hertzog has to monitor these different times to make sure his multiple databases are properly synchronized.

These are not requirements of the present disclosure. Multiple databases, multiple 'personal information management applications,' and logging in from different locations at different times are requirements of Hertzog that teach away from the present disclosure. For the present disclosure, a timing difference is not required. The present disclosure requires alternate contact data of the same type as the inputted data. The present disclosure has nothing to do with synchronization of the same data at two different time periods or on two different computers; no time difference is necessary.

By way of example, in the present disclosure, the database could contain information from one slice of time and still function. It would work perfectly well if an entity in the database had multiple types of contact data, for example, more than one Email address, from the same time slice.

Hence, Hertzog teaches away from the present disclosure by requiring a time differential between data elements. Hertzog's requirement has no logical analog in the present disclosure. These are not requirements of the present disclosure, and, hence, Hertzog and Smith teach away from the present disclosure.

4.) Hertzog's requirement of "non-simultaneous validation" by a user teaches away from the present disclosure.

Since Hertzog deals with a consumer being able to synchronize their personal address books on multiple computers or applications, Hertzog requires that the user not be logged into their address books on these various computers at the same time. A logical part of this is the requirement that the consumer have *at least two* address books, on *at least two* personal information management applications. Hertzog refers to this limitation by saying that "the first and second personal informations are not simultaneously validated for access by the personal information management application", which is another way of saying the consumer can't be logged in on both at the same time (see, e.g., Hertzog claim 1, 6, and 10 or Hertzog paragraph 0062).

Since the present disclosure does not require a consumer-based application, let alone two or more consumer applications, Hertzog's requirement has no logical analog in the present disclosure. These are not requirements of the present disclosure, and, hence, Hertzog and Smith teach away from the present disclosure.

5.) Hertzog implicitly requires that each database entry for an entity include a name and this requirement teaches away from the present disclosure.

Since Hertzog deals with a consumer being able to synchronize their personal address book using a Rolodex-like virtual address card, Hertzog implicitly requires that each address card have a corresponding name attached to it. Hertzog's entire system is useless without a name on each address card. See, e.g., Hertzog, Figures 8-10, 12, 14, 19, and 20. After all, all Hertzog searches return a virtual card to a GUI for viewing by a human. Without being able to see a name, a user would find the system useless.

The present disclosure's primary embodiment teaches for a query of a piece of contact information, such as an Email address, to be processed with the database, and to return another Email address. No name is required. No virtual card is required. No human viewing is required.

These are not requirements of the present disclosure, and, hence, Hertzog and Smith teach away from the present disclosure.

6.) Hertzog's requirement, of a sighted human being looking at a GUI, teaches away from the present disclosure.

Since Hertzog deals with a consumer being able to synchronize their personal address book using a Rolodex-like virtual address card, Hertzog implicitly requires that a human being is able to look at the virtual cards on a GUI and type in changes.

As noted above, Hertzog requires a personal information management application that is to be synchronized with a central, remote database (a "server database, 34": see Hertzog paragraph 0050) and the virtual cards that make up the database be able to be seen by a human user on a GUI. Smith's disclosure, on the other hand, deals with authentication procedures for being able to access a database. Whether apart or together, these citations teach away from the present disclosure in that they require a sighted (non-blind) human being be able to look at the output of Hertzog's database inquiries.

Moreover, Hertzog's disclosure does not work without a computer monitor; Hertzog's disclosure does not work without a computer monitor that is on *and* functioning *and* connected to a computer running a personal information management application; *and* Hertzog's disclosure does not work if a human being is not sitting in front of the monitor displaying a personal information management application with their eyes open and conscious.

All of these are not requirements of the present disclosure, and, hence, Hertzog and Smith teach away from the present disclosure.

7.) Hertzog's requirement of a typed word search teaches away from the present disclosure.

As noted above, Hertzog inherently requires that a person sitting a computer, looking at a personal information management application on a GUI, type in a word search in a dialog box and get back a search result, in the form of another dialog box (see, e.g., Hertzog, paragraph 110 for a discussion of the "power find panel"). The next intrinsically required step is that the person look at the results and decide for themselves what alternate contact points there are for the person listed on the virtual card in the results.

These inherent requirements teach away from the present disclosure, which has no requirements of a personal information management application, no GUI, no dialog boxes, no user sitting at a computer which is running a personal information manager application, no decision by a person as to what alternate contact points there are on a card.

In order for Hertzog to make his disclosure work for a human sitting at a computer screen, he included a word search function in a dialog box. This teaches away from the present disclosure which does not have such limitations or requirements.

This, in combination with Smith, would teach away from the present disclosure.

IV. AMENDMENTS TO THE SPECIFICATION:

The attached amendments to the specification are entirely typographical, such as deleting erroneous character artifacts, and inserting proper paragraph breaks. Two paragraphs have been amended to add references already implied by the text.

All changes are non-substantive and are merely for clarity.

V. AMENDMENT TO CLAIMS:

Claims 1, 13, 23, 25, 27, 30, and 31 were amended.

Claim 30 has been amended to reflect that it refers to the preceding claim, Claim 29, rather than Claim 25. Claim 30's citation of "said changed data elements" refers to the prior claim, Claim 29, not Claim 25, as originally stated. Claim 25 contains no "changed data elements" reference. This is a non-substantive correction of a typographical error.

Claim 31 has been amended to correct a typographical error, which is non-substantive in nature: the agreement of an article to its subject noun.

VI. AMENDMENTS TO THE DRAWINGS:

The Examiner has objected to all drawings, stating that "the drawings must show every feature of the invention specified in the claims...." This is not a requirement under law. 35 USC section 113 provides that the applicant may furnish drawings "where necessary for the understanding of the subject matter sought to be patented." Further, according to the MPEP, "[i]t has been USPTO practice to treat an application that contains at least one process or method claim as an application for which a drawing is not necessary for an understanding of the invention...." MPEP 601.01(f). As such, the Examiner is incorrect.

In the present disclosure, Figures 3 through 18 could have been included in the body of the specification, as tables or non-text elements of the specification. MPEP 608.01.I.(b)(6). The Applicant is willing to amend the specification to insert those tables into the body of the specification, if the Examiner so desires. The Applicant asks for leave to so amend if this is so requested. This would be a non-substantive change. As such, the Applicant asks that the Examiner withdraw the objections to those figures.

Replacement drawings for Figures 1-2 and 15, 15A, 15B, and 16 are attached to this document.

VII. CONCLUSION

For the reasons stated above, the Applicant asks that the Examiner enter the amendments contained herein, withdraw all rejections with respect to the claims, and allow the application to issue as a patent.

Thank you,
Sincerely,



Ed Skoch